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Ontario Geological Survey
Open File Report 6116

Report of Activities, 2002 Resident Geologist Program

Regional Land Use Geologist Report: Northwestern, Northeastern and Southern Ontario Regions

2003

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ONTARIO GEOLOGICAL SURVEY

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Resident Geologist Program

Regional Land Use Geologist Report:
Northwestern, Northeastern and Southern Ontario Regions

by

R.L. Debicki, A.P. Drost, P. Hinz, D.J. Rowell and G.R. Yule

2003

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Ontario Geological Survey
Resident Geologist Program

Regional Land Use Geologists—2002

by

R.L. Debicki, A.P. Drost, P. Hinz, D.J. Rowell and G.R. Yule

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CONTENTS

Regional Land Use Geologists—2002

INTRODUCTION 1
Water Crossings—An Example of Regional Land Use Geologists' Involvement in Land Use Planning 2
LAND USE POLICY AND PLANNING COORDINATOR 3
Introduction 3
Ontario's Living Legacy 4
Other Protected Areas 5
Forest Management Plans 6
Municipal Planning 9
First Nations 9
Other 10
THE REGIONAL LAND USE GEOLOGISTS 11
NORTHWEST REGIONAL LAND USE GEOLOGIST 11
Introduction 11
Ontario's Living Legacy 12
Other Protected Areas 13
Forest Management Plans 13
Other Activities on Crown Land 15
Municipal Planning 15
First Nations 16
Other 16
NORTHEAST REGIONAL LAND USE GEOLOGIST 17
Introduction 17
Ontario's Living Legacy 17
Forest Management Plans 19
Other Activities on Crown Land 20
Municipal Planning 21
First Nations 22
Other 23
SOUTHERN REGIONAL LAND USE GEOLOGIST 24
Introduction 24
Ontario's Living Legacy 24
The Niagara Escarpment Plan 24
Oak Ridges Moraine 25
Forest Management Plans 25
Municipal Planning 26
First Nations 26
Other 27

Tables

1. Regulation status of Ontario's Living Legacy (OLL) sites province wide. 4
2. List of Forest Management Units in Ontario (2003–2004) 7
3. Regulation status of "Boreal West" Ontario's Living Legacy (OLL) sites 12
4. List of Forest Management Units in the Northwest Regional Land Use Geologist's region (2003–2004) 14
5. Regulation status of "Boreal East" Ontario's Living Legacy (OLL) sites 17
6. List of Forest Management Units in the Northeast Regional Land Use Geologist's region (2002–2003). 19
7. List of 2005 Forest Management Plans and their Sustainable Forest Licence holders in the Northeast Regional Land Use Geologist's region 20
8. Water Resources Management Plans under development in the Northeast Regional Land Use Geologist's region 21
9. Advanced exploration or mine development projects in the Northeast Regional Land Use Geologist's region 21
10. Regulation status of "Great Lakes–St. Lawrence" Ontario's Living Legacy (OLL) sites 24
11. List of Forest Management Units in the Southern Regional Land Use Geologist's region (2002–2003) 25

Figures

1. Locations of Forest Management Units in Ontario, April 1, 2003 6

REGIONAL LAND USE GEOLOGISTS—2002

R.L. Debicki[1], A.P. Drost[2], P. Hinz[3], D.J. Rowell[4] and G.R. Yule[5]

[1] Land Use Policy and Planning Coordinator, Resident Geologist Program, Ontario Geological Survey

[2] Regional Land Use Geologist—Northwest, Resident Geologist Program, Ontario Geological Survey

[3] Acting Regional Land Use Geologist—Northwest, Resident Geologist Program, Ontario Geological Survey

[4] Regional Land Use Geologist—Southern, Resident Geologist Program, Ontario Geological Survey

[5] Regional Land Use Geologist—Northeast, Resident Geologist Program, Ontario Geological Survey

INTRODUCTION

The Regional Land Use Geologist (RLUG) group was established within the Resident Geologist Program in 2000 to respond to clients in government, agencies, non-governmental organizations and the mineral sector. Many of the services provided by the Regional Land Use Geologists relate to land use planning and access matters that are of interest to, or may directly affect, prospectors and developers and their activities. Many of the services require knowledge and expertise that are outside the traditional knowledge and experience of practicing geoscientists. For example, land use planning in Ontario can involve a number of different provincial ministries, and more than 12 provincial legislative acts with accompanying regulations, guidelines and policies. Some relate to Crown land, while others relate to private land.

Group members have geoscience and mineral sector expertise, combined with a broad understanding of land use legislation, regulations and issues. They work closely with the Resident Geologist Program's Regional Resident Geologists and District Geologists, other representatives of the Ministry of Northern Development and Mines (MNDM), and staff members from other ministries to optimize Ontario's land base for sustainable, safe and environmentally responsible mineral resource development. Their activities include

- working with Ministry of Natural Resources (MNR) to minimize the impacts on the mineral sector of implementing the Ontario's Living Legacy land use strategy;
- providing information to MNR and other ministries about the geology and mineral potential of areas of interest, and the possible effects on the mineral sector of projects such as the preparation of Management Plans for existing protected areas, and initiatives such as "Room to Grow" and the "Northern Boreal Initiative";
- working with MNR, the mineral sector, and the forest industry to provide opportunities for representatives of the mineral sector to comment during the forest management planning process, and to encourage them to participate, and to ensure that mining lands and access to them are considered along with the mineral potential of the area during preparation of Forest Management Plans;
- participating actively in regular meetings with counterparts from MNR to share information between the ministries, primarily in the context of land use planning;
- working with MNR, Ministry of Municipal Affairs and Housing (MMAH), municipal governments and planning consultants to ensure that the annual sale of limited areas of Crown land does not preclude future exploration and development on existing mining lands or in areas of high mineral potential;
- working with MMAH, municipal planners, and planning consultants to ensure that municipal Official Plans, Official Plan Amendments, and consents (lot severances) have regard for mineral resources, mining operations, possible related hazards, and mining lands;
- helping representatives of First Nations understand and participate in the mineral exploration and development process, while at the same time making the mineral sector aware of First Nations communities' concerns about activities on their traditional lands along with ways of mitigating or accommodating those concerns; and
- working to make the public at large, along with members of various interest groups, more aware of the interests and importance of the mineral sector and its activities and entitlements in Ontario.

The objective of the group is to effectively represent mineral-related values in the context of competing interests for land use, while helping mineral sector representatives be aware of the implications of legislation and regulations other than the *Mining Act* on their activities. These interests vary from place to place across the province, but all have the potential to restrict the availability of land, the access to it, or the activities on it, for mineral exploration and development purposes.

The work of the Regional Land Use Geologists was interrupted during 2002 by the 8-week long labour disruption resulting from the Ontario Public Service Employees Union (OPSEU) strike, which started March 13. Although the Land Use Policy and Planning Coordinator is not a member of OPSEU, and was therefore not on strike, all 3 Regional Land Use Geologists were off work.

Contact information for the Regional Land Use Geologists, and other representatives of the Resident Geologist Program is available from

http://www.mndm.gov.on.ca/mndm/mines/resgeol/contact_e.asp

Please contact the Land Use Policy and Planning Coordinator or the Regional Land Use Geologist for your area of interest for further information about matters described in this annual report.

Water Crossings—An Example of Regional Land Use Geologists' Involvement in Land Use Planning

Legislation and regulations other than the *Mining Act* that may control certain aspects of mineral exploration and development work include the provincial *Public Lands Act* and the federal *Fisheries Act*. For example, MNR requires and administers work permits for water crossings, construction of buildings, and construction of roads on Crown land under the provisions of the *Public Lands Act*. The use of a tent camp on mining claims does not require a work permit, but the use of a temporary camp on lands other than mining lands may require the issuance of a temporary Land Use Permit under the *Public Lands Act*.

Likewise, the development of a trail for mineral exploration does not require a work permit, unless it involves a water crossing. In addition to requirements under the *Public Lands Act*, the establishment of water crossings may also trigger requirements for permits under other legislation. The provincial *Lakes and Rivers Improvement Act*, the federal *Fisheries Act* (Department of Fisheries and Oceans), and the federal *Navigable Waters Protection Act* (Department of Fisheries and Oceans – Canadian Coast Guard) may be applicable.

The *Lakes and Rivers Improvement Act* involves the approval for the construction of a "dam" across a watercourse. A bridge or culvert may act as a dam in certain circumstances. The development and use of any trails, roads or water crossings on Crown land is considered public access, and due regard must be taken to protect the public and the environment.

With the exception of ice bridges and winter seasonal crossings, a hydrological analysis of the watershed area above the water crossing will be required to help determine if the proposed crossing can pass the required design flow. This would be either the 5-year or 25-year water flow. Log and ice bridge construction may be considered if streams are frozen to the bed of the stream, but may be discouraged if the creek maintains water flow throughout the winter. Ice bridges and temporary bridges must be removed by April 1st when their use is finished.

MNR has computer software available to assist with the watershed analysis. The software will currently predict the flow rate in the stream of interest. Plans are to enhance this software so that it will also determine culvert sizes or bridge opening requirements. An increasingly common practice in the forestry and mineral industry is the use of portable bridges as a quick and temporary means of providing access across waterways with little or no environmental impact. For winter crossings (i.e., structures that will be removed prior to April 1st), it is recommended that the underside of the bridge be at least 0.5 m above the water level or ice surface to prevent flooding or ice jams from occurring.

The ministry also maintains files on certified temporary bridge structures. These structures must be re-certified every 5 years by a competent professional structural engineer. The structural integrity of these structures must also meet MNR's standards for public safety in accordance with its Crown Land Bridge Policy. MNR also requires applicants/owners to sign a Memorandum of Understanding, committing to look after the maintenance, inspection and eventual abandonment of the water crossing.

Work permit applications for water crossings are forwarded by MNR to the federal Department of Fisheries and Oceans (DFO), which administers the *Fisheries Act*. This act provides protection for fish habitat. Fish habitat includes such sites as direct and indirect spawning areas, and the watercourses used during fish migration. The definition of "fish" includes minnows, shellfish, and crustaceans, eggs and sperm or any other stage of the life cycle of fish. The DFO reviews work permit applications for "Harmful Alteration, Disturbance or Destruction of fish habitat" (HADD) through effects on or adjacent to the waterway such as increased siltation, thermal changes, and migration blockage on all classes of waterways.

The DFO requires information regarding species present (warm or cold water fisheries), fish habitat locations, and site conditions such as shoreline slopes. It defaults to the most conservative approach when dealing with HADD, and uses the axiom "Headwater impacts roll downstream" when reviewing the project up and down stream. If the water crossing may impede navigable waters, the DFO will include the Canadian Coast Guard, which administers the *Navigable Waters Protection Act*. A different set of terms and conditions apply for the crossing of navigable water.

There are 3 types of acknowledgement for projects:

1. a "No" or a "request for a redesign";
2. a "Letter of Advice" for projects with little or no impact on the watercourse or fish habitat; or
3. a "Letter of Authorisation".

Letters of Authorisation include an environmental screen, and may trigger the *Canadian Environmental Assessment Act*, compensation to repair or replace fish habitat, financial assurance, and site monitoring.

This summary is not a complete discussion of water crossings, but provides an example of legislation and regulations outside of the *Mining Act* that control the activities of explorationists. It is recommended that interested parties contact their local Regional Land Use Geologist and the MNR District Lands and Water Technician for more information about water crossings.

LAND USE POLICY AND PLANNING COORDINATOR

Introduction

The Land Use Policy and Planning Coordinator is located in the Resident Geologist Program offices in Sudbury, and is responsible for the overall coordination of the Regional Land Use Geologist group and for initiatives that are provincial in scope. As such, the Land Use Policy and Planning Coordinator must be aware of matters of importance in the areas of each of the Regional Land Use Geologists, and must identify common existing and emerging issues for comprehensive review and consistent response province wide.

The Land Use Policy and Planning Coordinator therefore works on many of the same matters as the Regional Land Use Geologists, but with a provincial rather than regional perspective. Other responsibilities include working with the Senior Manager of the Resident Geologist Program and the Northeast and Northwest Regional Managers on the program's overall work plan objectives, and with the Regional Land Use Geologists themselves to ensure that they are familiar with existing and new government directives and programs, and that they take advantage of appropriate intra-governmental opportunities.

Ontario's Living Legacy

The Ontario's Living Legacy (OLL) land use strategy announced in 1999 is the province's Crown land management initiative to provide representative protected areas in central-northern Ontario, while strengthening the economic health of the region. The land use strategy identified a total of 378 new provincial parks, park additions and conservation reserves, 9 Signature Sites and 86 Enhanced Management Areas within the Area of the Undertaking as identified under the Timber Class Environmental Assessment. Plans are for the new parks and conservation reserves to be regulated, and strategies for the other special management areas to be developed over the course of several years.

The ongoing protected site regulation process started in June of 2000. The Land Use Policy and Planning Coordinator continued to work closely with the Regional Land Use Geologists, staff of Ministry of Natural Resources (MNR), and representatives of the mineral sector on implementing the land use strategy during the year. The status of the regulation process, province wide, is indicated in Table 1. Plans are to regulate as many as 73 additional sites early in 2003.

Work included ensuring that the Regional Land Use Geologists were aware of upcoming requirements for information and had the resources needed to provide input at the appropriate time. Representatives of mineral sector organizations were also notified to make sure that they were aware of requests from MNR for input at various stages of Ontario's Living Legacy implementation, particularly with regard to planning for Signature Sites.

Table 1. Regulation status of Ontario's Living Legacy (OLL) sites province wide.

Current Status	Parks			Conservation Reserves		
	Number of Sites Regulated	Total Number of Sites	% of Sites Regulated	Number of Sites Regulated	Total Number of Sites	% of Sites Regulated
Number of Sites Regulated	33	106	31%	132	272	49%
Planned Regulation - Early 2003	23	106	22%	50	272	18%
Total to be Regulated - Early 2003	56	106	53%	182	272	67%

The Land Use Policy and Planning Coordinator continued to participate on the committee to develop the "provincially significant mineral potential" (PSMP) mineral resource assessment process for metallic minerals, and the sub-committee to develop the corresponding mineral resource assessment process for industrial minerals. The work included preparing the manual explaining the proposed methodology for public review, posting it on the Environmental Registry for public review and comment, and receiving and responding to feedback from the public review process.

The new mineral resource assessment process was originally developed to support a provision in the Ontario's Living Legacy land use strategy whereby "controlled exploration" would be allowed in those portions of new provincial parks and conservation reserves where the mineral potential was determined to be provincially significant. In mid-March 2002, however, the Government found that reconciling the needs of protected areas and the interests of the exploration community in such areas was proving too difficult, so announced that "controlled exploration" would not be allowed within the new protected areas.

When it announced that "controlled exploration" would not be allowed, the government invited the Ontario Prospectors Association (OPA) and the Partnership for Public Lands to meet, with the support of MNDM and MNR, to propose options for addressing mineral sector concerns for OLL sites where mining lands abut, or are surrounded by, new protected areas. The Land Use Policy and Planning Coordinator worked with the Regional Land Use Geologists and colleagues at MNR to provide information requested by the OPA in support of these meetings.

Although the original impetus for developing the PSMP mineral resource assessment process was annulled, work to enhance and refine the process continued. It will be a useful tool in identifying and minimizing competing interests in future land use planning processes, including municipal planning and land use planning for Crown land.

In support of the future use of the PSMP mineral resource assessment process as a planning tool, the Land Use Policy and Planning Coordinator worked with a summer assistant to develop a GIS-compatible compilation of data concerning peat deposits in the province. It will complement the data relating to metallic and industrial mineral resources in the areas of interest.

As mentioned previously, the Ontario's Living Legacy land use strategy identifies 9 Signature Sites in addition to the 378 new parks, park additions and conservation reserves. The Land Use Policy and Planning Coordinator represented the Mines and Minerals Division on an interministerial committee that worked with MNR and a team of planning consultants to develop a strategy for the Great Lakes Heritage Coast Signature Site. Information about the mineral resources, exploration activity, and mining land holdings in the area were provided as part of the information to be considered during development of the strategy.

Information was also provided directly to MNR regarding planning for the Kawartha Highlands and Nipigon Basin Signature Sites, and through the Regional Land Use Geologists participating on the teams for the various Signature Sites. It included clarification about the stages of the mining sequence and existing controls on mineral exploration and development, in relation to the preparation of guidelines for exploration and development in environmentally sensitive portions of enhanced management areas in the Nipigon Basin Signature Site.

The Land Use Policy and Planning Coordinator also reviewed, analyzed and consolidated other information regarding various aspects of implementing the land use strategy; prepared and presented briefing materials to senior staff of Ministry of Northern Development and Mines (MNDM) and MNR; and guided the Regional Land Use Geologists in related work. These activities included reviewing and providing input into information circulars regarding new protected areas, newly prepared Park Management Plans, and Statements of Conservation Interest prepared for new conservation reserves.

Other Protected Areas

The new parks and conservation reserves established through the Ontario's Living Legacy land use strategy supplement and complement existing protected areas both within and outside of the area covered by the land use strategy. There are ongoing needs to manage the existing protected areas, as well as to respond to plans to establish new protected areas under the "Room to Grow" provisions of the Ontario Forest Accord, signed in 1999.

During 2002, the Land Use Policy and Planning Coordinator reviewed and commented on Park Management Plans for a number of provincial parks, and responded to invitations to comment on plans for new interpretive centres at Lake Superior and Killarney provincial parks. For some parks, the Management Plans were revisions of existing plans that were undergoing their normal 10-year reviews. For others, the Management Plans were new plans for parks that have been existence for almost 20 years, but which have never had a Management Plan due to their remote location, and the fact that they are non-operating parks with very few visitors. Comments were provided either directly, or through the Regional Land Use Geologist for the area where the parks are located.

Points worthy of comment included recognition of areas of high mineral potential with the potential for mineral exploration and development adjacent to the parks; the need to keep access routes to such areas available for the mineral sector to use; and opportunities for interpretive programs to educate visitors about the mineral resources and geological histories of the areas.

Comments were also submitted to MNR regarding their proposed Class Environmental Assessment for parks and conservation reserves. Class Environmental Assessments exempt activities that are part of that class from needing specific, individual approval under the *Environmental Assessment Act*. This proposal was to facilitate decision making for activities relating to the general management and operation of provincial parks and conservation reserves.

The "Room to Grow" provisions of the Ontario Forest Accord, signed in 1999, provided that the Ontario Forest Accord Advisory Board would propose a methodology for identifying and assessing new candidate sites for parks and conservation reserves to complete ecological representation in the Ontario's Living Legacy planning area. This methodology was completed in early 2002, and is available on the Internet at

http://www.mnr.gov.on.ca/mnr/oll/ofaab/room2grow.pdf

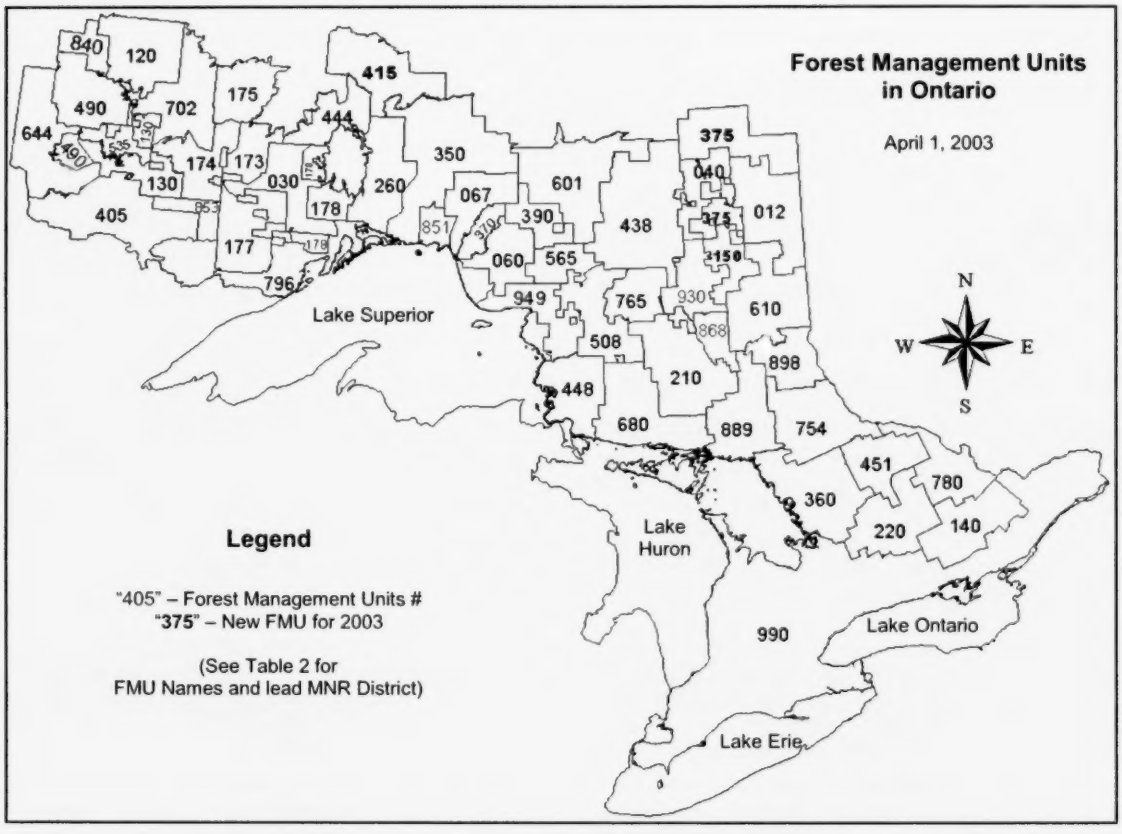
The assessment process includes consideration of the natural heritage values of candidate sites jointly with other values and factors that may relate to the site. With regard to mining lands, this means considering whether there are any claims, leases, patents, or exploratory licences of occupation present. With regard to mineral potential, this means considering mineral resource assessments done using the PSMP mineral resource assessment methodology.

During 2002, the Land Use Policy and Planning Coordinator worked with the Northwest Regional Land Use Geologist on the preliminary evaluation of several candidate sites in the northwestern part of the province, and prepared directions for completing mineral resource assessments of selected sites using the PSMP mineral resource assessment evaluation process.

Forest Management Plans

As of April 1st 2003, there will be 50 Sustainable Forest Licence (SFL) management units in the province. The number of Forest Management Units dropped from 54 in 2001–2002 when some areas were amalgamated. The boundaries of the Forest Management Units are illustrated in Figure 1.

Figure 1. Locations of Forest Management Units in Ontario, April 1, 2003.



The names of the various Forest Management Units are listed in Table 2 in numerical order according to the management unit number shown in Figure 1. Some management units straddle the boundaries between 2 of the Regional Land Use Geologists' areas, so are listed later in this document in the reports for both areas. The new names for the consolidated units, along with the names of the former sites that were consolidated, are also listed in Table 2.

Each management unit requires a Forest Management Plan (FMP) to guide all forestry operations in the Crown forests in question. Forestry operations include road construction, maintenance, and abandonment; stream crossings and their abandonment; timber harvesting; and silvicultural practices. The plan must have regard for all resource values including social (cultural, heritage, and tourism) and ecological (fish, wildlife and environmental). The forest industry must also have regard for (and according to MNR policies, shall consult with) holders of mining rights regarding the planned annual forest work schedules and their potential impact on exploration activities and installations (i.e., disturbance of survey grids, trenches, drill casings, or claim boundaries). The forest sector may have to provide compensation to the mineral sector for such impacts and disturbances.

The Land Use Policy and Planning Coordinator and the Regional Land Use Geologists worked with other MNDM staff members to provide information to MNR regarding the mineral potential and mining lands status of areas where forestry management planning is underway. They also worked to convey information to mineral sector clients about opportunities to contribute to forest management planning in their areas. In particular, information was provided through handouts and posters at the Prospectors and Developers Association of Canada annual convention, and at the Northwest and Northeast regional symposia sponsored by local prospectors' associations.

Table 2. List of Forest Management Units in Ontario (2003–2004).

FMU #	FMU Name ([1] - new for 2003)	Plan Period	Status	SFL Effective Date	Lead MNR District	RLUG Region
012	Iroquois Falls Forest	2000 - 2020	SFL	April 1, 1999	Cochrane	NE
030	Spruce River Forest	2001 - 2021	SFL	April 1, 1999	Thunder Bay	NW
040	Smooth Rock Falls Forest	2000 - 2020	SFL	April 1, 1995	Cochrane	NE
060	White River Forest	2003 - 2023	SFL	pending	Wawa	NW
067	Big Pic Forest	2002 - 2022	SFL	April 1, 1996	Wawa	NW
120	Trout Lake Forest	1999 - 2019	SFL	April 1, 1998	Red Lake	NW
130	Wabigoon Forest	2003 - 2023	SFL	April 1, 1997	Dryden	NW
140	Mazinaw–Lanark Forest	2001 - 2021	SFL	pending	Bancroft	SC
150	**Nighthawk Forest[1]**	2003 - 2023	SFL	pending	Timmins	**NE**
173	Brightsand Forest	1999 - 2019	SFL	April 1, 1998	Dryden	NW
174	English River Forest	2000 - 2020	SFL	April 1, 1998	Dryden	NW
175	Caribou Forest	2002 - 2022	SFL	April 1, 1998	Sioux Lookout	NW
177	Dog River–Matawin Forest	2000 - 2020	SFL	April 1, 1998	Thunder Bay	NW
178	Black Sturgeon Forest	2001 - 2021	SFL	April 1, 2001	Nipigon	NW
210	Spanish Forest	2000 - 2020	SFL	April 1, 2001	Sudbury	NE
220	Bancroft–Minden Forest	2001 - 2021	SFL	April 1, 2001	Bancroft	SC
260	Lake Nipigon Forest	2001 - 2021	SFL	pending	Nipigon	NW
350	Kenogami Forest	2000 - 2020	SFL	April 1, 1997	Nipigon	NW
360	French–Severn Forest	1999 - 2019	SFL	April 1, 1998	Parry Sound	SC
370	Black River Forest	2001 - 2021	SFL	April 1, 1996	Wawa	NW
375	**Cochrane–Moose River Forest[2]**	2003 - 2023	CR		Cochrane	NE
390	Nagagami Forest	2001 - 2021	dSFL		Wawa	NE
405	Crossroute Forest	2002 - 2022	SFL	April 1, 2002	Fort Frances	NW
415	**Ogoki Forest[3]**	2003 - 2023	SFL	pending	Nipigon	NW
438	Gordon Cosens Forest	2000 - 2020	SFL	April 1, 2001	Hearst	NE
444	Armstrong Forest	2000 - 2020	SFL	April 1, 1997	Thunder Bay	NW
448	Algoma Forest	2000 - 2020	SFL	April 1, 1997	Sault Ste. Marie	NE
451	Algonquin Park Forest	2000 - 2020	AFA	April 1, 1997	Algonquin Park	SC
490	Whiskey Jack Forest	1999 - 2019	SFL	April 1, 1997	Kenora	NW
508	Superior Forest	2001 - 2021	SFL	pending	Chapleau	NE
535	Dryden Forest	2001 - 2021	SFL	April 1, 1998	Dryden	NW
565	Magpie Forest	1999 - 2019	SFL	April 1, 1996	Wawa	NE
601	Hearst Forest	2002 - 2022	SFL	pending	Hearst	NE
610	Timiskaming Forest	2001 - 2021	SFL	April 1, 1997	Kirkland Lake	NE
644	Kenora Forest	2001 - 2021	SFL	April 1, 2002	Kenora	NW
680	Northshore Forest	2000 - 2020	SFL	April 1, 1998	Sault Ste. Marie	NE
702	Lac Seul Forest	2001 - 2021	SFL	April 1, 1998	Sioux Lookout	NW
754	Nipissing Forest	1999 - 2019	SFL	April 1, 1996	North Bay	NE
765	Pineland–Martel Forest	2001 - 2021	dSFL/SFL	n/a / April 1, 1995	Chapleau	NE
780	Ottawa Valley Forest	2001 - 2021	SFL	April 1, 1999	Pembroke	SC
796	Lakehead Forest	2002 - 2022	SFL	April 1, 1998	Thunder Bay	NW

Table 2. Continued

FMU #	FMU Name ([1] - new for 2003)	Plan Period	Status	SFL Effective Date	Lead MNR District	RLUG Region
840	Red Lake Forest	2003 - 2023	SFL	April 1, 1999	Red Lake	NW
851	Pic River Ojibway Forest	2001 - 2021	SFL	April 1, 1998	Nipigon	NW
853	Sapawe Forest	2000 - 2020	SFL	April 1, 1998	Fort Frances	NW
868	Shiningtree Forest	2001 - 2021	SFL	April 1, 1998	Timmins	NE
889	Sudbury Forest	2000 - 2020	SFL	April 1, 1998	Sudbury	NE
898	Temagami	1999 - 2019	CR		North Bay	NE
930	Romeo Malette Forest	2002 - 2022	dSFL		Timmins	NE
949	Wawa Forest	2000 - 2020	SFL	April 1, 1997	Wawa	NE
990	Southern Ontario			n/a	various	SC

Status:

- Forest Management Units are designated under the Crown Forest Sustainability Act, Section 7
- SFL - Sustainable Forest Licence; CR - Crown Managed; dSFL - deemed SFL; AFA - Algonquin Forest Authority
- Information (Status, SFL Name, SFL Effective Date) current at date of list preparation.
- SFL Effective Date reflects the original SFL date or an SFL amendment date reflecting a boundary change.
- All management units effective as of April 1, 2003.

April 1, 2003 Changes:

New FMU Name (FMU#)	Previous FMU Names (FMU#)
[1] Nighthawk Forest (150)	Driftwood Forest (410), Timmins Forest (400) and Timmins (900)
[2] Cochrane–Moose River Forest (375)	Cochrane (520) and Moose River (738)
[3] Ogoki Forest (415)	Ogoki Forest (241) and Nakina North Forest (240)

Projected April 1, 2004 Change:

New FMU Name	Previous FMU Names (FMU#)
English River Forest	English River Forest (174) and Brightsand Forest (173)

The mineral sector can provide input and voice concerns regarding development of access roads, identification of areas of potential disturbance to mineral exploration assets, and the abandonment of roads and water crossings. It is important that the mineral sector take advantage of such opportunities to ensure that its interests are considered and accommodated as much as possible during development and implementation of the plans. Industry representatives have worked toward this goal in 2002, as more of them accepted the responsibility of representing mineral sector interests on MNR Local Citizens' Committees (LCCs).

The Land Use Policy and Planning Coordinator assessed MNR's review of its Timber Class Environmental Assessment for Timber Management on Crown Lands in Ontario. A 1994 decision of the Environmental Assessment Board required that the original document, which consisted of 115 terms and conditions, be reviewed after it had been in effect for 8 years. As noted earlier, Class Environmental Assessments exempt activities that are part of that class from needing specific, individual approval under the *Environmental Assessment Act*.

The review undertaken in 2002 was designed to evaluate the effectiveness of the original process, and to make recommendations for amendments and the extension of the Class Environmental Assessment. MNDM's interest in the review was to minimize the negative impacts of forestry practises relating to the abandonment of access routes on the mineral sector. In addition, MNDM worked to ensure that amendments to the Class Environmental Assessment would make forestry operators aware of areas of high mineral potential. Such information would help them predict the areas where explorationists would follow when new roads were built, and where ongoing access would be wanted, even after the forestry operations were completed. MNDM will continue to work with MNR in 2003, when the new Class Environmental Assessment will be finalized, and related training modules and manuals are prepared.

Municipal Planning

Development on private land in areas with municipal governments is largely subject to the control of the Ministry of Municipal Affairs and Housing (MMAH) through a "One-Window Approach to Municipal Planning". The Land Use Policy and Planning Coordinator and the Regional Land Use Geologists work closely with MMAH planners and planning consultants on municipal planning matters. This work helps ensure that provisions of the Provincial Policy Statement of the *Planning Act* relating to the mineral sector are adhered to when planning decisions are made, and that responses from MNDM to planning applications are consistent province wide.

The Land Use Policy and Planning Coordinator provided information and guidance related to planning for mineral resources and mine sites to MMAH, and a number of planning consultants and municipalities, reviewed 1 draft municipal Official Plan, several Official Plan Amendments, and several severance applications in 2002. Numerous other requests for information were directed to the Regional Land Use Geologist for the areas in question in an effort to ensure that appropriate consideration and accommodation were given to present and future mineral resources, and to public health and safety matters associated with mining-related hazards.

Related work included representing MNDM on 2 standing committees that relate to municipal planning, and a third special committee relating to the 5-year review of the Provincial Policy Statement.

The standing committees include representatives from MMAH, MNR, Ministry of Environment, Ministry of Culture, Ministry of Transportation, Ministry of Agriculture and Food, and Conservation Ontario (the network of 36 conservation authorities in Ontario). Their work focussed on ensuring that the planning-related functions of each ministry do not impinge upon the functions, responsibilities or interests of the others; that provincial interests are considered during municipal planning; and that the *Planning Act* is implemented efficiently and effectively. Their work was also aimed at ensuring that planners from ministries and municipalities across the province are aware of their responsibilities under the *Planning Act* and *Municipal Act*, and know about the sources of information and advice that are available to them in making their planning decisions.

As a result, the Land Use Policy and Planning Coordinator helped the Regional Land Use Geologists, supported by Regional Resident and District Geologists, train planners about mineral resources, mining operations and potential related hazards, and supply information to planners who are developing or modifying their Official Plans. This work was done on request throughout the year, as well as through displays and staff participation at regional planning events in Thunder Bay, Sudbury and Kingston, and at the annual conference of the Ontario Professional Planners' Institute in London.

The special committee relating to the mandated 5-year review of the Provincial Policy Statement, which is linked to the *Planning Act*, included representatives from various ministries, Conservation Ontario, municipalities, planning consultants, and various sectoral organizations. It addressed the sections of the statement that direct planning decisions in sites with various types of natural heritage features.

First Nations

The Ministry of Northern Development and Mines recognizes that First Nations and the mineral sector may be uneasy about dealing with land use issues in areas of mutual interest because of their lack of understanding of each other. The Land Use Policy and Planning Coordinator took advantage of a number of opportunities during 2002 to become more familiar with the respective concerns of the groups, and to identify options for overcoming these concerns.

There are approximately 63 First Nation reserves or communities in the Northwest Regional Land Use Geologist's region, 29 in the Northeast Regional Land Use Geologist's region, and 34 in the Southern Regional Land Use Geologist's region.

First Nation communities are aware that mineral exploration is taking place on their traditional lands, as exploration for diamonds and other commodities extends into the northern parts of the province. They are concerned that exploration activities will negatively impact upon their treaty and constitutional rights, and are trying to balance outside interests with personal, community and economic development and environmental protection on their

traditional lands. They propose to achieve this through education and training; communications; building relationships and trust with mining industry representatives; revenue sharing; joint management; and employment opportunities within a framework based on traditional values and culture.

At the same time, the mineral sector wants clarity and certainty concerning its rights to explore for and develop new mineral discoveries within these lands. To help create an environment that addresses each other's concerns and interests, and to promote development opportunities for First Nations at all stages of the mining sequence from mineral exploration to mine development and ultimate rehabilitation.

The Land Use Policy and Planning Coordinator provided information to both First Nations and mineral sector representatives regarding mineral exploration and development in the north during 2002. It is recommended that mineral sector representatives notify and consult with the First Nations communities in whose traditional lands they are working as early in the exploration sequence as possible, in an effort to establish a good basis for discussions if and when the exploration programs are successful.

Information materials for use in First Nation communities were provided to communities in response to specific requests, and shared with other MNDM staff members who were visiting communities to discuss mineral exploration and mining. In addition, the Land Use Policy and Planning Coordinator contributed to a draft list of terms and definitions relating to exploration and mining that will be translated into Cree, Oji-Cree and Ojibway as a resource for translators who may not be familiar with the terms and their meanings.

Some work during 2002 was related to the settlement of outstanding land claims in Ontario. For example, options for addressing mineral-related matters in the Temagami land claim settlement under development during 2002 were assessed, and other options were suggested. Other work was done to support negotiations relating to the land claim of the Algonquins of Golden Lake. Finally, work was done in response to requests from the Government of Canada with regard to areas under review due to federal obligations to First Nations.

Other

In addition to the activities relating to the specific initiatives outlined above, the Land Use Policy and Planning Coordinator was involved in a wide range of general activities related to land use planning matters, and communications initiatives during the year.

The work included responding to requests submitted subject to the provisions of the *Freedom of Information and Protection of Privacy Act* and *the Environmental Bill of Rights*, preparing reports, slide sets, briefing materials, etc. for audiences within and outside of MNDM, and providing input into the development of a mineral policy for Ontario that is currently under consideration within the Ministry. It also included monitoring items of interest related to land use to the mineral sector and advising representatives of the local associations when such items were identified. These items included plans developed by other ministries, the forest industry, or others that might constrain access to, or the availability of, areas of high mineral potential for exploration and development.

Where appropriate, these plans were reviewed, and options for avoiding impacts on the mineral sector were supplied to those working on the plans in question. Where the plans had been circulated to interested parties for comment, or had been posted for public review on the Environmental Registry, representatives of provincial and regional associations were advised of the opportunity to comment. MNR's new Crown land use atlas, which was released for public review and comment on December 10, 2002, is an example of such an initiative.

The atlas can be viewed at http://crownlanduseatlas.mnr.gov.on.ca/

The atlas consolidates local land use policies for Crown land in a large part of Ontario, including the Ontario's Living Legacy land use planning area. It is a significant achievement, which will provide full-time on-line access to Crown land management information in Ontario. Since it will be MNR's official source of land use direction for Crown lands after the 90-day public review period ends and any necessary changes have been made, it will be a useful complement to CLAIMaps III for mineral sector representatives. Policies for the management of Crown surface rights, including parks, conservation reserves, enhanced management areas, and other areas of interest will all be available through text-based and map-based searches.

The Land Use Policy and Planning Coordinator also assisted in the development and presentation of poster displays concerning land use planning and access issues and information presented at the annual Northwestern and Northeastern Ontario Mines and Minerals symposia, the Prospectors and Developers Association of Canada annual convention and the Ontario Geoscience and Exploration Symposium, among other events.

THE REGIONAL LAND USE GEOLOGISTS

The 3 Regional Land Use Geologists are normally located in the Resident Geologist Program offices in Thunder Bay, Timmins and Sudbury and are responsible for northwestern Ontario, northeastern Ontario, and Ontario south of the French River, respectively. The Northwest Regional Land Use Geologist was reassigned to a 6-month acting position in August 2002, however, during which time his replacement was situated in Kenora. The Northeastern and Southern Regional Land Use Geologists co-share responsibility for the area along the north shore of Lake Huron, when practical.

As noted above, contact information for the Regional Land Use Geologists is available on-line at

http://www.mndm.gov.on.ca/mndm/mines/resgeol/contact_e.asp

Monthly reports featuring detailed accounts of the activities of the Regional Land Use Geologists' activities may be viewed on the Resident Geologist Program web site at

http://www.mndm.gov.on.ca/mndm/mines/resgeol/rlug/month_e.asp

The work of each of the Regional Land Use Geologist relates to land use activities and initiatives in their geographic areas, and encompasses the full range of matters outlined in the introduction. Some of the main activities of the Regional Land Use Geologists in 2002 were

- working with the Ministry of Natural Resources (MNR) to implement the Ontario's Living Legacy land use strategy;
- promoting options for involving the mineral sector in forest management and other Crown land use planning processes;
- enhancing awareness amongst Ministry of Municipal Affairs and Housing (MMAH) workers, municipal planners, and planning consultants about mineral exploration and development across Ontario; and
- building relationships with First Nations.

Information about the activities of each of the Regional Land Use Geologists is included in the following sections of this report.

NORTHWEST REGIONAL LAND USE GEOLOGIST

Introduction

The Regional Land Use Geologist position in the Northwest Region was staffed by A.P. Drost from January to August 2002, and by P. Hinz on an acting basis from August to December 2002.

The Northwest (NW) Regional Land Use Geologist represented the interests of the mineral sector at 24 external land use-related events and meetings, and gave 6 presentations to various groups regarding minerals-related land use issues in the Northwest Region. The presentations were to such diverse client groups as the Northwest Regional Advisory Committee (an advisory body to the MNR Regional Director), municipal planners, and prospectors' associations.

The NW Regional Land Use Geologist was also responsible for monitoring the Environmental Registry web site at

http://www.ene.gov.on.ca/samples/search/Ebrquery_REG.htm

where all government plans and decisions affecting the natural, social and economic environment are posted pursuant to the *Environmental Bill of Rights*. Postings that were land use related or had the potential to affect the mineral sector anywhere in the province were distributed for attention to the appropriate Regional Land Use Geologists, and to representatives of the Ontario Prospectors Association and regional client associations.

Ontario's Living Legacy

Of the 378 new parks and conservation reserves identified in the Ontario's Living Legacy (OLL) land use strategy, 21 new parks and 75 new conservation reserves are located in the Boreal West area, which is roughly coincident with the Northwest Regional Land Use Geologist's region.

The NW Regional Land Use Geologist reviewed proposed boundary adjustments as part of the preparation to regulate the proposed parks and conservation reserves. Potential impacts on mineral values were identified, and recommendations regarding boundary adjustments were made where areas of mineral potential or mining lands would be impacted. OLL sites reviewed during 2002 included 4 new provincial parks and additions to 4 existing provincial parks. The new provincial parks are: P2239 – Ruby Lake Provincial Park (Natural Environment Class); P2250 – Black Sturgeon River Provincial Park (Waterway Class); P2363 – Eagle–Dogtooth Provincial Park (Waterway Class); and P2287 – St. Raphael Provincial Park (Waterway Class). The reviews of boundary adjustments also assessed possible additions to the network of protected areas being considered under the *Room to Grow* initiative.

The additions to existing provincial parks were: P2295 – Sandbar Lake Provincial Park (Natural Environment Class); P2347 – Blue Lake Provincial Park (Natural Environment Class); P2274 – Divide Ridge Provincial Park (Nature Reserve Class); and P2304 – Turtle River Provincial Park (Waterway Class).

The current regulation status of the Boreal West OLL protected areas is shown in Table 3, along with the plans for regulating sites early in 2003.

Table 3. Regulation status of "Boreal West" Ontario's Living Legacy (OLL) sites.

Current Status	Parks			Conservation Reserves		
	Number of Sites Regulated	Total Number of Sites	% of Sites Regulated	Number of Sites Regulated	Total Number of Sites	% of Sites Regulated
Number of Sites	4	21	19%	13	75	17%
Planned Regulation – Early 2003	10	21	48%	30	75	40%
Total to be Regulated – Early 2003	14	21	67%	43	75	57%

The NW Regional Land Use Geologist also acted as a resource for the Ontario Prospectors Association (OPA) and Partnership for Public Lands (PPL) discussions on boundary solutions for mining lands surrounded by OLL sites, and represented the mineral sector on the Nipigon Basin Signature Site planning team. The NW Regional Land Use Geologist attended Signature Site planning sessions and assisted MNR staff during open houses in Nipigon, Beardmore, Armstrong and Thunder Bay, and influenced planning decisions by highlighting the need to be sensitive to the mineral industry's needs and interests and the mineral potential of the area. The open houses provided an opportunity for members of communities surrounding the Signature Site to learn about, and comment on, the Ecological Land Use and Resource Management Strategy developed for the area.

A significant product of the Nipigon Basin Signature Site planning team was draft recommendations for exploration best practices in enhanced management areas within the Signature Site. These guidelines are designed to support "light-footprint" exploration activities in environmentally sensitive portions of the Signature Site's enhanced management areas (EMAs). They adopt existing forest management prescriptions for avoiding sensitive sites. Once finalized, they may form the basis of similar guidelines for enhanced management areas elsewhere in Ontario.

The NW Regional Land Use Geologist also arranged to coordinate geological representation with the Red Lake Resident Geologist on the Woodland Caribou Signature Site planning team, in a planning exercise scheduled to begin early in 2003.

Other Protected Areas

In addition to work related to OLL protected areas, the NW Regional Land Use Geologist worked to ensure that planners considering supplements to the Ontario's Living Legacy sites under the "Room to Grow" provisions of the Ontario Forest Accord are aware of the mineral potential within sites under consideration. This work included reviewing the mineral potential of several sites with Ministry of Natural Resources (MNR) representatives, and facilitating the involvement of the Ontario Prospectors Association (OPA) and the Northwestern Ontario Prospectors Association (NWOPA) in discussions about areas of interest.

The NW Regional Land Use Geologist provided a significant amount of input on the mineral and economic development potential and exploration and mining history to the author of 2 new Park Management Plans. The plans were for the Pipestone and Otoskwin–Attawapiskat remote waterway-class parks that were regulated in 1984. The NW Regional Land Use Geologist also reviewed and commented on proposed amendments to the Neys Provincial Park Management Plan. Potential conflicts between the proposed amended plan and a proposed resource extraction (dimension stone) and deep-water port shipping operation were identified and addressed.

The NW Regional Land Use Geologist also monitored progress on the boundary refinements for conservation reserve C2344 – Rainy Lake Islands, in the Redgut Bay area. Although attempts to mitigate conflict with existing mining lands were unsuccessful, the NW Regional Land Use Geologist was able to ensure that public consultation concerning the proposed changes was expanded.

Other work relating to protected areas included reviewing proposed Management Plans for existing parks; reviewing proposed boundary adjustments to various sites and recommending against them in cases where areas of high mineral potential would be enclosed; and identifying areas where earth-science related information can be incorporated into park interpretive programs.

Bowater Incorporated was licenced to install 2 new sawmills within its timber limits during 2001 and 2002. As a result of the Sharing Agreement adopted under the *Room to Grow* initiative, the Bowater Forest Management Units became subject to the provision that for any increase in fiber capacity, there shall be a concomitant increase in protected area space. Consequently, 14 new candidate protected area sites were recommended within the Bowater Forest Management Units. Several of these sites captured existing mining claims and/or were situated in areas of high mineral potential in greenstone belts. A review of the 14 sites by the NW Regional Land Use Geologist led to the recognition that 2 sites should be eliminated from consideration, and significant boundary adjustments should be made to several other sites to minimize their impact on mineral values.

Forest Management Plans

As of April 1st 2003, there will be 50 Sustainable Forest Licence (SFL) management units in the province, of which 23 are located in the Northwest Region. The number of Forest Management Units dropped from 54 in 2001–2002 when some areas were amalgamated. The locations of the Forest Management Units are illustrated above in Figure 1.

In 2002, 3 Forest Management Plans were approved and implemented in the Northwest Region. Forest Management Plans are being prepared for 3 Forest Management Units for approval in 2003. There are also 3 plans being developed for implementation in 2004, and background information is being assembled for 3 plans to be implemented in 2005. The names of the Forest Management Units in the NW Regional Land Use Geologist's region are listed in Table 4. They are listed in chronological order according to the SFL plan period. Each plan spans a rolling 20-year cycle and is reviewed every 5 years. This means, for example, that plans spanning between 1999–2019 will be renewed in 2004 for the period 2004–2024, and plans spanning between 2000–2020 will be renewed in 2005 for the period 2005–2025.

The Forest Management Plans being developed for approval in 2003 are Wabigoon Forest, Red Lake Forest, and Ogoki/Nakina North Forest (combined). The plans being developed for implementation in 2004 are Trout Lake Forest, Whiskey Jack Forest, and Brightsand/English River Forests (combined), while those being prepared for 2005 are Armstrong Forest, Dog River–Matawin Forest, and Sapawe Forest.

Table 4. List of Forest Management Units in the Northwest Regional Land Use Geologist's region (2003–2004).

FMU #	FMU Name ([1] - new for 2003)	Plan Period	Status	Plan Review Date	Lead District	RLUG Region
415	**Ogoki Forest[1]**	1998 - 2018	SFL	2003	Nipigon	NW
840	Red Lake Forest	1998 - 2018	SFL	2003	Red Lake	NW
130	Wabigoon Forest	1998 - 2018	SFL	2003	Dryden	NW
173	Brightsand Forest	1999 - 2019	SFL	2004	Dryden	NW
120	Trout Lake Forest	1999 - 2019	SFL	2004	Red Lake	NW
490	Whiskey Jack Forest	1999 - 2019	SFL	2004	Kenora	NW
444	Armstrong Forest	2000 - 2020	SFL	2005	Thunder Bay	NW
177	Dog River–Matawin Forest	2000 - 2020	SFL	2005	Thunder Bay	NW
174	English River Forest	2000 - 2020	SFL	2005	Dryden	NW
350	Kenogami Forest	2000 - 2020	SFL	2005	Nipigon	NW
853	Sapawe Forest	2000 - 2020	SFL	2005	Fort Frances	NW
370	Black River Forest	2001 - 2021	SFL	2006	Wawa	NW
178	Black Sturgeon Forest	2001 - 2021	SFL	2006	Nipigon	NW
535	Dryden Forest	2001 - 2021	SFL	2006	Dryden	NW
644	Kenora Forest	2001 - 2021	SFL	2006	Kenora	NW
702	Lac Seul Forest	2001 - 2021	SFL	2006	Sioux Lookout	NW
260	Lake Nipigon Forest	2001 - 2021	SFL	2006	Nipigon	NW
851	Pic River Ojibway Forest	2001 - 2021	SFL	2006	Nipigon	NW
030	Spruce River Forest	2001 - 2021	SFL	2006	Thunder Bay	NW
067	Big Pic Forest	2002 - 2022	SFL	2007	Wawa	NW
175	Caribou Forest	2002 - 2022	SFL	2007	Sioux Lookout	NW
405	Crossroute Forest	2002 - 2022	SFL	2007	Fort Frances	NW
796	Lakehead Forest	2002 - 2022	SFL	2007	Thunder Bay	NW

Status:

- Forest Management Units are designated under the Crown Forest Sustainability Act, Section 7
- SFL - Sustainable Forest Licence
- Information (Status, SFL Name, SFL Effective Date) current at date of list preparation.
- All management units effective as of April 1, 2003.

April 1, 2003 Changes:

New FMU Name (FMU#)	Previous FMU Names (FMU#)
[1] Ogoki Forest (415)	Ogoki Forest (241) and Nakina North Forest (240)

Projected April 1, 2004 Change:

New FMU Name	Previous FMU Names (FMU#)
English River Forest	English River Forest (174) and Brightsand Forest (173)

The NW Regional Land Use Geologist provided presentations on mineral sector values, issues and concerns and how they relate to forest road access and road and stream crossing abandonment strategies, to the Planning Teams for each of Trout Lake, Brightsand, Whiskey Jack and Magpie 2004 Forest Management Units. Each presentation was made prior to the start of the 27-month planning cycle for each of the forest management units.

The NW Regional Land Use Geologist was also named as Plan Advisor to the Forest Management Planning Teams so that further minerals-related information and support can be provided as required, and to ensure that the Planning Teams receive timely information on planning decisions that might affect the mineral sector. In the role of Plan Advisor to the Whiskey Jack Forest and Trout Lake Forest, the Regional Land Use Geologist attended open houses in Kenora and Ear Falls and participated in an MNR Forest Management Planning Overview training session.

The NW Regional Land Use Geologist responded to a growing number of information requests regarding forest access roads. He also acted as facilitator in an informal dispute resolution matter amongst 2 prospectors, the Ministry of Natural Resources, a forestry company, and a remote tourism operator concerning imminent plans to

close a forest access road. The road closure would have eliminated access to active mineral claims in an area of high mineral potential and high remote tourism values. As a result of this meeting, an amicable resolution was reached.

Input regarding access provisions was also provided in support to the Mines and Minerals Division's analysis of the MNR's Review of the Class Environmental Assessment on Timber Management on Crown Lands in Ontario. This important review was mandated in 1994 when the original Class Environmental Assessment, directing how MNR should manage timber on Crown lands, was initially approved. Changes since then include the enactment of the *Crown Forest Sustainability Act* and changes in the roles and responsibilities of the MNR and the forest industry.

Other Activities on Crown Land

The NW Regional Land Use Geologist worked jointly with NWOPA to recruit, train and provide ongoing support to new mineral sector representatives (prospectors, geologists, etc.) on Local Citizens Committees (LCCs). These individuals will represent mineral sector interests on the LCCs regarding the Forest Management Plan, Annual Work Schedules, and proposed road abandonment or restricted access strategies. Mineral sector representatives will be able to express their concerns as soon as situations arise, and act as contacts for the NW Regional Land Use Geologist when further information and/or support in resolving issues is required. In support to the mineral sector representatives on LCCs, the Regional Land Use Geologist gave presentations to several LCCs to raise awareness of mineral sector interests and concerns.

The NW Regional Land Use Geologist also acted as an advisor during the Shebandowan Lake Management Plan review process and participated in open houses in Thunder Bay and Shebandowan where posters identifying mineral values were included as part of the displays. Discussions with stakeholders explored the impact of removing the access road, railway crossing and bridge to the former INCO Shebandowan Mine. The removal of road infrastructure is part of closure plan requirements for the former Shebandowan Mine filed with the Mines Group, Ministry of Northern Development and Mines. Preliminary discussions with stakeholder groups, the MNR and the Ontario Prospectors Association were initiated to evaluate liability and maintenance issues related to keeping the road open.

The NW Regional Land Use Geologist also contributed to the MNR's Northern Boreal Initiative (NBI) and encouraged the formation of the NBI Mineral Sector Team. The NBI mandate is to focus on community-based land use planning by Aboriginal communities to accommodate the expansion of timber harvesting and management north of the present limit of the *Crown Forest Sustainability Act* (the Area of Undertaking). The area is just north of the northern limit of the area covered by the *Ontario's Living Legacy* (OLL) land use strategy.

In conjunction with any new timber harvesting (i.e., increase in fiber capacity that takes place), a guiding principle under the OLL Forest Accord is that there shall be a concomitant increase in protected areas within the area covered by the NBI. The NBI Mineral Sector Team was formed to ensure that mineral interests are considered in NBI land use planning and decision making processes. The Provincially Significant Mineral Potential (PSMP) mineral resource assessment methodology will be a prominent tool in this process as well as consideration for existing mining lands within the NBI area.

The NW Regional Land Use Geologist responded to 14 written requests from MNR for MNDM input on a variety of Crown land use planning activities. They included gravel pit applications, a proposed Crown Land disposition, a land use permit application, land use dispositions on lake trout lakes, and the wording for the *Implications to Mineral Exploration and Development* in its summary of recommendations to the Ontario Forest Accord Advisory Board.

Municipal Planning

In 2002, the NW Regional Land Use Geologist reviewed 4 Official Plans and 2 Official Plan Amendments for various municipalities. In addition, 29 consents (severance applications), 2 draft plans for subdivisions and 2 zoning by-law amendments were reviewed.

The NW Regional Land Use Geologist worked with staff of the Ministry of Municipal Affairs and Housing (MMAH) and the Ministry of Environment with regard to the Official Plan for Township of Pickle Lake. The

Township's Official Plan included development on known mine tailings from the former Central Patricia mine site. High arsenic contents in soil and contaminated groundwater are the primary concerns related to this issue. The NW Regional Land Use Geologist reviewed and provided summaries of reports relating to groundwater and tailings studies contained within the files of Mines Group, Ministry of Northern Development and Mines. At the time or writing, this issue had not been resolved.

The NW Regional Land Use Geologist also assisted MMAH with files dealing with the severance of surface rights from the mining rights in an area of high to extremely high mineral potential, and with a proposed cottage lots subdivision development in an area of high mineral potential. In the latter, MNDM suggested that an appropriate cautionary clause be placed on title for surface rights in perpetuity for the new cottage lots. The intent of this being to minimize or remove future conflicts by informing potential buyers up-front that their property and surrounding lands were in a area of high mineral potential, and that the underlying mineral rights were held by the Crown and available for staking by interested third parties. Consequently, mineral exploration might occur on or about their properties at some time in the future.

The NW Regional Land Use Geologist assisted the planning consultant for Marathon with a geological data search at the start of the municipality's Official Plan renewal. The municipality contains the world-class Hemlo gold deposits. The NW Regional Land Use Geologist also made an invited presentation at MMAH's Northwest Regional Municipal Conference where there was representation from all communities in the northwest.

First Nations

The NW Regional Land Use Geologist worked closely with officials of the Nishnawbe-Aski Nation treaty organization, OPA, the Ontario Mining Association (OMA) and NWOPA, in discussions related to preparing and distributing translated information concerning the mineral sector to First Nation communities.

The NW Regional Land Use Geologist also continued to provide advice to the Lake Nipigon Ojibway Band (Animbiigoo Zaagiigan Anishnaabek) regarding mineral values and the establishment of new First Nation reserve lands at Kinghorn Road. The Band is now engaged in mineral exploration activities and has received funding to examine the feasibility of training First Nation individuals as contractors and workers in the exploration sector. The NW Regional Land Use Geologist was also involved in a conflict resolution meeting in the remote north involving a First Nation community and a junior exploration company camped and conducting exploration on Aboriginal traditional lands.

In August 2002, A.P. Drost began a 6-month training and development assignment with Mines Group within the Mines and Minerals Division, MNDM. Amongst other responsibilities, the duties of the assignment involved meeting with representatives of several First Nation communities to make residents aware of the implications of mineral exploration and development and to learn about their interests and issues regarding these activities. These positive interactions and other discussions undertaken during the training and development assignment have formed the basis of a "Best Practices" Consultation Guidebook being prepared in part by the Ministry for use by the mineral sector when exploring on Aboriginal traditional lands.

Other

Local and regional prospecting communities rely on the NW Regional Land Use Geologist as being an advocate and facilitator when dealing with other Ontario government ministries and other stakeholders on various land use issues that may affect prospectors and mineral explorationists.

By maintaining geoscience expertise through attendance at various technical meetings and reviewing geological literature, the NW Regional Land Use Geologist continued to identify emerging mineral sector issues and options for addressing them. The options were presented to the mineral sector through poster displays and technical presentations at various venues, including the 2002 Northwest Mines and Mineral Symposium, the 2002 Prospectors and Developers Association of Canada annual convention, the 2002 Ontario Exploration and Geoscience Symposium, and the 2002 conference of the Canadian Aboriginal Minerals Association.

NORTHEAST REGIONAL LAND USE GEOLOGIST

Introduction

During 2002, the Northeast (NE) Regional Land Use Geologist endeavoured to promote and optimize the land base available for mineral exploration and mine development. The NE Regional Land Use Geologist is responsible for addressing land use related issues pertaining to or affecting the mineral sector in Northeastern Ontario, an area that extends north of the French River to and including the James Bay and Hudson Bay lowlands, and east from the town of Marathon to the Quebec border.

The NE Regional Land Use Geologist, in collaboration with the other Regional Land Use Geologists, contributed to a wide range of initiatives including policies and guidelines that direct land use planning, as well as site-specific work relating to Crown and private lands across the Northeast Region.

Consultation and assistance was provided to a broad range of clients including prospectors, representatives of junior exploration companies and senior mining companies, concerned citizens, various First Nations communities, small and large municipalities, commercial and industrial enterprises including forest industry representatives, and various provincial ministries and federal agencies.

Ontario's Living Legacy

The *Ontario's Living Legacy* (OLL) land use strategy identified a total of 378 new protected areas in Ontario. There are 93 OLL sites comprising 31 provincial parks and 62 conservation reserves in the Boreal East Region. To date, 32 sites (11 parks and 21 conservation reserves) have been regulated. The OLL Boreal East Region is defined as the Ministry of Natural Resources (MNR) districts of Wawa, Chapleau, Timmins, Kirkland Lake, Cochrane, and Hearst.

Although the NE Regional Land Use Geologist's region includes much of the MNR districts of North Bay, Sudbury and Sault Ste. Marie, the Southern Ontario Regional Land Use Geologist handles the OLL Great Lakes–St. Lawrence Region for logistical reasons.

The current regulation status of the Boreal East protected areas in the NE Regional Land Use Geologist's area is shown in Table 5, along with the plans for regulating sites early in 2003.

Table 5. Regulation status of "Boreal East" Ontario's Living Legacy (OLL) sites.

Current Status	Parks			Conservation Reserves		
	Number of Sites Regulated	Total Number of Sites	% of Sites Regulated	Number of Sites Regulated	Total Number of Sites	% of Sites Regulated
Number of Sites	11	31	36%	21	62	34%
Planned Regulation - Early 2003	5	31	16%	8	62	13%
Total to be Regulated - Early 2003	16	31	52%	29	62	47%

Geologically, much of the Northeast Region is defined by the Abitibi Subprovince, which contains the Abitibi greenstone belt. For the past century, the Abitibi greenstone belt has been the focus of significant mineral exploration and mining activity. The discovery and development of several different types of world-class mineral deposits in the region has resulted in its reputation as a globally significant mineral producer with globally significant mineral potential. Consequently, staked, leased and patented mining claims cover much of the area; some of which were affected by the introduction of new parks and conservation reserves in the area under the OLL initiative.

In accordance with the OLL land use strategy, areas where pre-existing mining lands were covered by new protected sites have been designated as "forest reserves". This means that no logging or related forestry activities can take place on these lands, however, mineral exploration and mine development can occur within forest reserves as long as the mining lands remain in good standing. It therefore remains "business as usual" for mineral-related activities on these lands according to the terms and conditions of the *Mining Act* and associated regulations. If and when these mining lands lapse and revert to the Crown under normal processes, the portions within the designated forest reserves are automatically withdrawn and become available for regulation as protected areas.

Of the 93 new parks and conservations reserves considered to have significant natural or earth science heritage values worth protecting in the OLL Boreal East region, 29 sites (31%) currently overlay at least some form of mining lands fabric. This represents a reduction in the number of OLL sites that impact mining lands compared to January 2002, when 34 OLL sites (37%) contained some form of mining lands fabric. In August 1999, 51 OLL sites within the Boreal East Region (55%) impacted on mining interests. The decline in the number of OLL protected sites impacting on mining lands is due primarily to claims and leases lapsing within forest reserves since 1999 and these lands not being available for re-staking.

This reduction of prospective land has reduced the opportunities for sustainable mineral exploration and mining in the region. The Ontario Government is currently working with 2 non-government organizations, the Ontario Prospectors Association (OPA) and the Partnership for Public Lands (PPL), to minimize and mitigate impacts on the remaining mining lands.

Pre-existing freehold mining patents originally impacted by the new OLL protected sites have been removed from forest reserves in recognition that these lands represent private property holdings and as such cannot be considered for regulation as protected areas.

Even though the Government has committed that it is to be "business as usual" for mineral exploration and development activities on mining lands within forest reserves, the new protected areas have been the cause of concern for some claim holders. The following 3 examples illustrate actions that have been taken to resolve some of these situations.

- The Groundhog River Waterway Park (P1569) was designated under the OLL. It consists of a 200 m shoreline buffer that extends along the watercourse almost continuously for 218 km. At present, this shoreline buffer zone is protected under interim measures in preparation for public consultation and eventual site regulation. Industrial activities and associated infrastructure are not allowed within parks regulated under the *Provincial Parks Act* or sites subject to interim protection prior to regulation. The NE Regional Land Use Geologist has been working with Falconbridge Ltd. and the Ministry of Natural Resources (MNR) in an effort to resolve issues relating to the need for access through the proposed park to support mine development at the company's nearby Montcalm property. All levels of local government and industry wish to see the development proceed, however, at the time of writing, the presence of the new waterway park remains problematic.
- The NE Regional Land Use Geologist assisted the MNR district office staff and a junior mining company resolve an issue concerning the effect, or perceived effect, of mineral exploration within OLL site P1544 by ensuring that the OLL site boundary withdrawals were depicted accurately on MNDM claim maps.
- Prior to their regulation in late 2002, the NE Regional Land Use Geologist consulted with MNR regarding minor changes to proposed OLL site boundaries for 7 OLL sites (C1558, P1524, P1530, P1543, P1544, P1550, P1568) that impact on pre-existing mining claims and high mineral potential areas.

The NE Regional Land Use Geologist worked with representatives of the MNR to develop a strategy to ensure access to mining lands in forest reserves surrounded by Ontario's Living Legacy protected areas and reviewed draft Statements of Conservation Interest for newly regulated conservation reserves.

The NE Regional Land Use Geologist also assisted the MNR's Signature Site planning teams by presenting poster displays during public information sessions designed to solicit public comment on site management plans. The Spanish River Valley Signature Site team held public information sessions and made contact with 185 people in the following communities: Sagamok, Biscotasing, Chapleau, Gogama, Chelmsford and Espanola. The Algoma Headwaters Signature Site team visited the communities of Searchmont, Chapleau, Thessalon and Sault Ste. Marie, and received input from 204 individuals who attended the sessions. Information regarding the bedrock geology, historical mineral exploration activity and mineral potential was also provided to the respective planning teams for these sites, as well as for the Nagagamisis Central Plateau Complex Signature Site.

At all the public information sessions, the NE Regional Land Use Geologist promoted the ideas that

- mineral exploration and mine development requirements need to be considered and balanced with natural heritage values during the establishment of new parks and conservation reserves;
- management plans for the new protected areas need to consider other activities and interests on surrounding Crown and private lands; and

- decades of mineral exploration activity has not significantly impacted or degraded the natural environment, since areas of high mineral potential that have long exploration histories were chosen for their natural heritage values as new protected areas.

Forest Management Plans

As mentioned previously, as of April 1st 2003, there will be 50 Sustainable Forest Licence (SFL) Forest Management Units in the province, 23 of which are located in the northeast. The names of the Forest Management Units in the NE Regional Land Use Geologist's region are listed in Table 6, along with the names of Deemed Forest Management Units and Crown Forests. They are listed in chronological order according to the SFL plan period. Each plan spans a rolling 20-year cycle and is reviewed every 5 years. This means, for example, that plans spanning between 1999–2019 will be renewed in 2004 for the period 2004–2024, and plans spanning between 2000–2020 will be renewed in 2005 for the period 2005–2025.

Table 6. List of Forest Management Units in the Northeast Regional Land Use Geologist's region (2002–2003).

FMU #	FMU Name ([1] - new for 2003)	Plan Period	Status	Plan Review Date	Lead District	RLUG Region
375	**Cochrane–Moose River Forest[1]**	1998 - 2018	CR	2003	Cochrane	NE
150	**Nighthawk Forest[2]**	1998 - 2018	SFL	2003	Timmins	**NE**
060	White River Forest	1998 - 2018	SFL	2003	Wawa	NE
565	Magpie Forest	1999 - 2019	SFL	2004	Wawa	NE
754	Nipissing Forest	1999 - 2019	SFL	2004	North Bay	NE
898	Temagami	1999 - 2019	CR	2004	North Bay	NE
448	Algoma Forest	2000 - 2020	SFL	2005	Sault Ste. Marie	NE
438	Gordon Cosens Forest	2000 - 2020	SFL	2005	Hearst	NE
012	Iroquois Falls Forest	2000 - 2020	SFL	2005	Cochrane	NE
680	Northshore Forest	2000 - 2020	SFL	2005	Sault Ste. Marie	NE
040	Smooth Rock Falls Forest	2000 - 2020	SFL	2005	Cochrane	NE
210	Spanish Forest	2000 - 2020	SFL	2005	Sudbury	NE
889	Sudbury Forest	2000 - 2020	SFL	2005	Sudbury	NE
949	Wawa Forest	2000 - 2020	SFL	2005	Wawa	NE
370	Black River Forest	2001 - 2021	SFL	2006	Wawa	NE
390	Nagagami Forest	2001 - 2021	dSFL	2006	Wawa	NE
765	Pineland–Martel Forest	2001 - 2021	dSFL/SFL	2006	Chapleau	NE
868	Shiningtree Forest	2001 - 2021	SFL	2006	Timmins	NE
508	Superior Forest	2001 - 2021	SFL	2006	Chapleau	NE
610	Timiskaming Forest	2001 - 2021	SFL	2006	Kirkland Lake	NE
067	Big Pic Forest	2002 - 2022	SFL	2007	Wawa	NE
601	Hearst Forest	2002 - 2022	SFL	2007	Hearst	NE
930	Romeo Malette Forest	2002 - 2022	dSFL	2007	Timmins	NE

Status:

- Forest Management Units are designated under the Crown Forest Sustainability Act, Section 7
- SFL – Sustainable Forest Licence; CR – Crown Managed; dSL – deemed SFL; AFA – Algonquin Forest Authority
- Information (Status, SFL Name, SFL Effective Date) current at date of list preparation.
- All management units effective as of April 1, 2003.
- Algoma & Wawa FMU are to be amalgamated by the 2005 plan.

April 1, 2003 Changes:

New FMU Name (FMU#)	Previous FMU Names (FMU#)
[1] Cochrane–Moose River Forest (375)	Cochrane (520) and Moose River (738)
[2] Nighthawk Forest (150)	Driftwood Forest (410), Timmins Forest (400) and Timmins (900)

Three Forest Management Plans (Big Pic, Hearst and Romeo Malette) were approved and implemented in the Northeast Region in 2002. New Forest Management Plans are currently being prepared for 3 Forest Management Units (Cochrane–Moose River Forest, Nighthawk Forest and White River Forest) for approval in 2003. The Cochrane–Moose River Forest is an amalgamation of the Cochrane and the Moose River areas and the Nighthawk Forest is a consolidation of the Driftwood Forest, Timmins and Timmins Forest areas. There are also 3 plans being developed for implementation in 2004 (Magpie Forest, Nipissing Forest and Temagami Forest). The NE Regional Land Use Geologist presented Mineral Values maps and discussed access and prior notification issues with the planning teams for these areas.

Background information is also now being assembled for an additional 7 Forest Management Plans to be implemented in 2005. These plans are listed in Table 7, along with the Sustainable Forest Licence holders in the respective areas. The Algoma Forest and Wawa Forest are listed separately in Table 6, but will be merged before the 2005 Forest Management Plan is developed.

Mineral sector clients are urged to review these plans as an aid in developing their exploration strategies that rely on access related to the Forest Management Plan road network. The Forest Management Plans include plans for new road access, access limitations, and road and water crossing abandonment, along with the recognition of natural heritage and other stakeholders' values on the landscape. Forest Management Plans for MNR – Northeast Region are archived in the MNR Regional office in South Porcupine and are available for viewing during normal business hours. Each MNR District office also has a copy of the plans for its area.

Table 7. List of 2005 Forest Management Plans and their Sustainable Forest Licence holders in the Northeast Regional Land Use Geologist's region.

Forest Management Plan	Sustainable Forest Licence Holder
Algoma/Wawa Forest	Clergue Forest Management Inc.
Gordon Cosens Forest	Tembec (Spruce Falls) Industries
Iroquois Falls Forest	Abitibi Consolidated
North Shore Forest	Northshore Forest Management Inc.
Smooth Rock Falls Forest	Tembec Industries
Spanish Forest	Domtar (E.B. Eddy) Forest Products
Sudbury Forest	Vermillion Forest Management Company Ltd.

The NE Regional Land Use Geologist attended 2 MNR training modules for Forest Management Planning. These sessions related to the Plan Overview and Data Preparation, and were intended to provide learning opportunities for the planning team members and for Local Citizens Committee (LCC) representatives. They were also opportunities for the NE Regional Land Use Geologist to meet and network with planning team members, LCC representatives and the MNR presenters, and to promote the consideration of mineral exploration and development values.

Other Activities on Crown Land

The concept of "controlled exploration" was adopted in 1996 by Government and Temagami area stakeholder groups and documented in the Temagami Comprehensive land use plan. Five sensitive areas were delineated to ensure that "controlled" claim staking and mineral exploration can continue, while ecological and aesthetic values are protected. New guidelines for exploration in these areas were announced in 1999. Work permits are required for some exploration and development activities in these areas, subject to regulations defined in the *Public Lands Act* – Reg.349/98, and in the *Mining Act* – Reg.356/98, s.1, even though work permits are not required for the same activities in other areas. During 2002, one application for a work permit for proposed mineral exploration work within the Temagami Skyline Reserve was reviewed and granted, subject to certain conditions under which the work could be performed.

In December 2000, the *Lakes and Rivers Improvement Act* (LRIA) was amended to establish the authority for the MNR to order dam owners to prepare Water Resources Management Plans in accordance with new guidelines approved by the Minister. This authority in relation to the preparation, amendment, approval and enforcement of the Water Resources Management Plans was further amended in June 2002, LRIA s. 23(1.1). The plans will address the management of in-stream flows and the water levels affected by the operation of hydroelectric/water control projects owned and operated by the various power generating corporations and water control projects operated by the MNR.

The MNR is working in conjunction with hydroelectric power generating companies and First Nation communities to commence a consultation process for watershed management. Initial projects in the northeast will relate to the 10 watersheds listed in Table 8, along with the name of the relevant MNR district office. For further information about these projects, please contact the local Regional Land Use Geologist or the MNR District Planner.

Table 8. Water Resources Management Plans under development in the Northeast Regional Land Use Geologist's region.

Watershed	MNR District Office
Abitibi	Cochrane
Blind River	Sault Ste. Marie
Matabitchuan River	North Bay
Mattagami River	Timmins
Michipicoten River	Wawa
Mississagi River	Sault Ste. Marie
Montreal River	North Bay
Spanish & Vermillion Rivers	Sudbury
Wanapitei River	Sudbury
White River	Wawa

There are currently at least 12 proposed advanced exploration or mine development projects at various stages of activity in the NE Regional Land Use Geologist's region. For additional information concerning these projects, please contact the MNDM Mines Group. These projects, along with their location, the company or consortium engaged in the work and the commodity being sought are listed in Table 9.

Table 9. Advanced exploration or mine development projects in the Northeast Regional Land Use Geologist's region.

Project	Location	Commodity	Company
Montcalm Project	Montcalm Township	Cu–Ni	Falconbridge Ltd.
Victor Project	BMA 527 834 Area	Diamonds	De Beers Canada Exploration Inc.
Mishi Project	Mishibishu Lake Area	Gold	River Gold Mines Ltd.
Jackrabbit Project	Chester Township	Gold	Northville Gold Corp.
Claude Rundle	Newton Township	Gold	Claude Rundle Gold Mines Ltd.
Clavos Project	German & Stock Townships	Gold	St. Andrew Goldfields Ltd.
Homer Project	Bristol Township	Gold	Holmer Gold Mines Limited
McCreedy West	Levack Township	Cu, Ni, PGE	FNX Mining Company Inc.
East Bull Lake	Shakespeare	Cu, Ni, PGE	Pacific North West Capital Corp.
River Valley	Dana Township	Cu, Ni, PGE	Pacific North West Capital Corp.
Davidson Tisdale	Tisdale Township	Gold	Northcott Gold Inc.
Pamour Project	Whitney Township	Gold	Porcupine Joint Venture

Municipal Planning

In 2002, the NE Regional Land Use Geologist reviewed 3 draft Official Plans and 7 Official Plan amendments for various municipalities. In addition, applications for 5 consents (severance applications), 1 subdivision development project, 2 Land Use Permits and 1 bylaw amendment were reviewed during the year. The Regional Land Use Geologists review municipal planning documents to ensure that they have regard for the minerals-related Provincial Policy Statement under the *Planning Act*. Provincial Policy Statement 2.2 addresses the treatment of mineral resources and high mineral potential areas, and recognizes and promotes public health and safety related to mine hazards in municipal planning processes.

Draft Official Plans were reviewed for the municipalities of Temagami, the Townships of MacDonald, Meredith & Aberdeen Addition, and the Town of Moosonee. Consultation was also provided through the Ministry of Municipal Affairs and Housing (MMAH) "One Window" to the City of Timmins, which is commencing a new Official Plan for the City.

In October, the NE Regional Land Use Geologist attended and presented a poster at the MMAH's Northeast Municipal Conference. The poster highlighted the rationale behind the requirement to consider mineral potential and mine-related hazards during land use planning, as well as the distinction between the mining rights and surface rights as they relate to the same property and different holders of property rights.

Work was also completed on "Best Practices" guidelines for MNDM involvement in land use planning, to ensure that MNDM responses to planning initiatives are consistent province-wide. The guidelines also ensure that planners have appropriate regard for mineral potential, mineral resources, and mining activities in municipal planning processes across Ontario. The following example illustrates the importance of considering mineral interests in municipal planning.

- The municipality of Kirkland Lake owns the surface rights to a parcel of land that they wished to convey to a private sector company for the construction and operation of an incinerator. Queenston Mining Inc. holds the mining rights for the same parcel of land through a 21-year mining lease. The subject land hosts a significant gold resource immediately beneath the proposed site of the incinerator. The plan to construct an incinerator immediately over the gold deposit raised several concerns, including access to the property for exploration and development purposes, impediments to future mining operations, crown pillar stability relative to the proposed surface facilities and surface and ground water monitoring requirements for operating the incinerator.

  The incinerator developer had not realized that another company held the mining rights or the potential impacts that might ensue on each other's operations. The developer subsequently relocated the site of the proposed incinerator 100 m to the south to accommodate Queenston Mining Inc.'s interests, and to secure a more stable site for the plant's foundations. Development of the incinerator is still pending.

First Nations

The NE Regional Land Use Geologist helped promote improved relations between several First Nation communities and junior exploration companies that proposed to conduct exploration on Aboriginal traditional lands.

On the recommendation of the NE Regional Land Use Geologist, numerous mineral industry clients have begun to notify local First Nation communities concerning their plans to conduct mineral exploration activities within First Nation traditional lands. Some of the First nation communities have embraced the notification process as an opportunity to promote community-based economic development. Others have recognized the opportunity that relationship building provides in protecting their interests through sharing information about their "area of vested interest" with the explorationists.

The NE Regional Land Use Geologist and Ann Wilson, District Geologist for the Wawa area, presented information regarding OLL site C1527, Manitou Mountain, to the Missinabie Cree First Nation during their annual community retreat in Missinabie. The Missinabie Cree have long regarded the Manitou Mountain site on Dog Lake as a sacred spiritual site. Currently, portions of the OLL protected site are covered by active mining claims, the remainder of the site has been withdrawn from staking. The OLL site will eventually be regulated as a protected area.

The NE Regional Land Use Geologist also provided consultation to First Nation communities regarding the Ministry's new policies GA 701-3 & 701-4 regarding the withdrawal from staking of Aboriginal culturally significant sites in the far northern parts of Ontario. Other considerations such as possible economic buffers for the exclusive use of local First Nation's communities adjacent to their reserves were also reviewed.

- Policy G.A. 701-3: "Aboriginal Culturally Significant Sites"

  As part of a pilot project to support the protection of Aboriginal culturally significant sites, the Ministry of Northern Development and Mines will consider withdrawing Aboriginal culturally significant sites from prospecting, staking, sale or lease in the far north of Ontario. Generally, these sites would be no larger than 200 metres by 200 metres.

- Policy L.P. 201-1: "Licence of Occupation: Community Mineral Resource Zones"

  Exploratory licences of occupation may be granted to First Nation communities under Policy L.P. 201-1. The Ontario Government is committed to helping people of the far north of Ontario develop their economies. As part of this commitment, the Minister of Northern Development and Mines created a pilot project to help First Nations of the far north explore for minerals in a specific area around their Reserves. The economic development zone created under the *Mining Act* would be limited to 1600 metres (4 claim units wide) around the perimeter of the Reserve. Far north First Nations may apply to the Assistant Deputy Minister, Mines and Minerals Division, Ministry of Northern Development and Mines, for a licence of occupation for such areas.

Farther south, the NE Regional Land Use Geologist continued to support the Ontario Native Affairs Secretariat (ONAS) Temagami Land Claim negotiating team. Plans for the possible establishment of new First Nation reserve lands and a waterway class park on Lake Temagami were reviewed. The introduction of a waterway class park on the shores of Lake Temagami would protect cottagers and local stakeholders from commercial development on the lake. Mineral sector issues and interests were also addressed during the planning process. A local geoscientist was contracted by MNDM to prepare a mineral resource assessment of the Temagami land claim "Set-Aside Lands" using the Provincially Significant Mineral Potential (PSMP) methodology. The NE Regional Land Use Geologist assisted in the preparation and editing of the mineral resource assessment. Areas of high mineral potential and existing mining lands are to be excluded from the proposed park. Existing provisions for "controlled exploration" and development in the area address the concerns that local stakeholders have concerning mining development in these areas of high mineral potential.

The NE Regional Land Use Geologist also provided assistance to ONAS during negotiations with a mineral exploration company to acquire certain mining lands for a potential First Nation community site in Strathcona Township. As part of the land claim settlement, ONAS is proposing to conduct engineering and feasibility studies for the potential development of the First Nations community site. In December 2002, Ontario (ONAS), the Temagami First Nation and Teme-Augama Anishnabai reached a consensus regarding settlement of a long-standing land claim settlement. Details regarding the terms of this settlement and legal documents remain to be developed.

Other

Local and regional prospecting communities rely on the NE Regional Land Use Geologist as being an advocate and facilitator when dealing with other Ontario government ministries and other stakeholders on various land use issues that may affect prospectors and mineral explorationists.

The NE Regional Land Use Geologist provided mineral exploration and land use consultation to the mineral sector and to various government agencies for areas in the Timmins region, and the Wawa, Oba, Temagami, Matachewan, Fort Hope, Attawapiskat, Lake Abitibi, White River, Swayze, Chapleau–Foleyet, Sudbury and Sault Ste. Marie areas.

By maintaining geoscience and related expertise through attending technical meetings, reviewing geological literature, and taking part in workshops relating to Aboriginal cultural awareness, the NE Regional Land Use Geologist continued to identify emerging mineral sector issues and options for addressing them. Information was made available through poster displays and technical presentations at a range of events. These events included the Northeast Mines and Mineral Symposium, the Prospectors and Developers Association of Canada annual convention, the Ontario Exploration and Geoscience Symposium, MMAH's Northeast Regional Municipal Conference, and the Algoma Headwaters Signature Site and Spanish River Signature Site public information sessions.

SOUTHERN REGIONAL LAND USE GEOLOGIST

Introduction

The Southern Ontario (SO) Regional Land Use Geologist is officially responsible for Manitoulin Island and the area south of the French River, but for logistical reasons, also supplied land use planning support during 2002 for the area along the north shore of Lake Huron.

There were many important land use planning initiatives in southern Ontario during 2002, many of which will change the framework and controls for mineral exploration and development. The SO Regional Land Use Geologist for southern Ontario was directly involved in many of these initiatives.

Ontario's Living Legacy

Of the 378 new protected areas designated under the Ontario's Living Legacy (OLL) land use strategy, 189 sites are located in south central Ontario. At the end of 2002, 116 sites had been regulated. The Ministry of Natural Resources (MNR) plans to regulate up to 105 additional sites province wide in the first 6 months of 2003, many of which are located in south central Ontario and have been subject to the public consultation process. The current regulation status of the Great Lakes–St. Lawrence protected areas is shown in Table 10, along with the plans for regulating sites early in 2003.

Table 10. Regulation status of "Great Lakes–St. Lawrence" Ontario's Living Legacy (OLL) sites.

Current Status	Parks			Conservation Reserves		
	Number of Sites Regulated	Total Number of Sites	% of Sites Regulated	Number of Sites Regulated	Total Number of Sites	% of Sites Regulated
Number of Sites	18	54	33%	98	135	72%
Planned Regulation - Early 2003	8	54	15%	12	135	9%
Total to be Regulated - Early 2003	26	54	48%	110	135	81%

In addition to the 378 new protected areas in the province, the Ontario's Living Legacy land use strategy announced 9 Signature Sites. Information regarding the bedrock geology, historical mineral exploration activity, and mineral potential of the 2 Signature Sites in south-central Ontario—the Kawartha Highlands Signature Site and the Great Lakes Heritage Coast Signature Site—was provided to the respective planning teams.

In December 2001, the Kawartha Highlands Signature Site Local Stakeholder Committee submitted its final report to the Minister of Natural Resources. In its report, the Local Stakeholder Committee recommended that the Kawartha Highlands Signature Site be regulated as a park. In the fall of 2002, the Minister of Natural Resources proposed a new land use designation, Recreation Reserve, in response to the report and a number of issues raised by other interest groups. The new designation will allow for the additional activities of snowmobiling, ATV use, hunting and fishing, but will still prohibit any natural resources and industrial development activities. The Act to establish Recreation Reserves as a class of protected areas, and to legislate the Kawartha Highlands Signature Site as a Recreation Reserve, has passed first reading.

The Spanish River Signature Site public consultation and open houses were held in the fall of 2002. The NE Regional Land Use Geologist presented a poster and attended the 4 open houses. Some of the material used at the open houses was prepared in Sudbury under the direction of the SO Regional Land Use Geologist.

The Niagara Escarpment Plan

The year 2002 was certainly quieter than 2001 with respect to the Niagara Escarpment Plan. The plan underwent its mandatory 5-year review in 2001. This meant that the SO Regional Land Use Geologist was busy reviewing proposed changes to the plan, submissions by various interest groups, technical submissions by various government ministries, and the hearing officer's report. There were only 2 Niagara Escarpment Plan Amendments forwarded to MNDM for review during 2002.

Oak Ridges Moraine

On December 14th 2001, the *Oak Ridges Moraine Conservation Act* received Royal Assent, and brought into effect the Oak Ridges Moraine Conservation Plan. As a result, the Ministry of Municipal Affairs and Housing (MMAH) offered a workshop to municipalities that were directly affected by the new Oak Ridges Moraine Conservation Plan. An invitation to participate was also extended to other ministries that have an interest in this major southern Ontario landform. The Land Use Policy and Planning Coordinator and the SO Regional Land Use Geologist attended this workshop.

Government ministries made presentations outlining the new planning details, timeframes, processes and procedures required under the plan. Following the workshop, municipalities were required to update their Official Plans and zoning bylaws to comply with the required changes within the timeframes outlined. This will mean a significant amount of work for many of the municipalities.

The aggregate industry has been given assurances under the new plan that currently licenced operations will continue as usual. New aggregate operations will be allowed in the Countryside land use designation while mineral aggregate operations may be allowed in the Natural Linkage designation, subject to certain controls and restrictions. New mineral aggregate operations will not be licenced within the Natural Core land use designation.

Forest Management Plans

As of April 1st 2003, there will be 50 Sustainable Forest Licence (SFL) management units in the province. The number of Forest Management Units dropped from 54 in 2001–2002 when some areas were amalgamated. The locations of the Management Units are illustrated in Figure 1. The names of the Forest Management Units in the Southern Regional Land Use Geologist's region are listed in Table 11 along with the names of Crown Forests. They are listed in chronological order according to the SFL plan period.

Table 11. List of Forest Management Units in the Southern Regional Land Use Geologist's region (2002–2003).

FMU #	FMU Name	Plan Period	Status	Plan Review Date	MNR Lead District	RLUG Region
990	Southern Ontario			n/a	various	SC
360	French–Severn Forest	1999 - 2019	SFL	2004	Parry Sound	SC
451	Algonquin Park Forest	2000 - 2020	AFA	2005	Algonquin Park	SC
220	Bancroft–Minden Forest	2001 - 2021	SFL	2006	Bancroft	SC
140	Mazinaw–Lanark Forest	2001 - 2021	SFL	2006	Bancroft	SC
780	Ottawa Valley Forest	2001 - 2021	SFL	2006	Pembroke	SC
Status:						
• Forest Management Units are designated under the Crown Forest Sustainability Act, Section 7						
• SFL - Sustainable Forest Licence; AFA – Algonquin Forest Authority						
• Information (Status, SFL Name, SFL Effective Date) current at date of list preparation.						
• All management units effective as of April 1, 2003.						

Each SFL area requires a Forest Management Plan to guide all forestry operations within the Crown forests in question over a rolling 20-year cycle that is reviewed every 5 years. This means, for example, that plans spanning between 1999–2019 will be renewed in 2004 for the period 2004–2024, and plans spanning between 2000–2020 will be renewed in 2005 for the period 2005–2025. Forestry operations include road construction, maintenance, and abandonment, stream crossings and their abandonment, timber harvesting and silvicultural practices.

Most of the land in Area 990 is privately held, so it does not have an overall Forest Management Plan. There are 5 Forest Management Units in the Southern Region. The Crown manages the Algonquin Park Forest. Forest Management Plans are under development for the French–Severn Forest for implementation in 2004.

Forest Management Plans must have regard for all resource values including social (cultural, heritage and tourism) and ecological (fish, wildlife and environmental). The forest industry must also have regard for, and according to MNR policies, shall consult with, the holders of mining rights in the forest management unit, regarding annual work schedules and potential impacts on exploration activities (i.e., disturbance of survey grids, trenches, drill casings, or claim boundaries). The forest sector may have to provide compensation to the mineral sector for such impacts and disturbances.

The SO Regional Land Use Geologist has been working to promote mineral resource values to Forest Management Plan authors, and to highlight opportunities for the mineral sector to contribute to the development of plans through the forest management planning process. As a result, a presentation was made to the French–Severn Forest Management Planning Team, and a joint presentation was made with the NE Regional Land Use Geologist to the Nipissing Forest Management Planning Team. Mineral sector representatives can provide input regarding the location of access roads, identification of areas of potential disturbance to mineral exploration assets, and the abandonment of roads and water crossings. Once the plans have been completed and approved, it is important to have mineral sector representation on the Local Citizens Committees (LCCs). The Regional Land Use Geologists have been actively trying to ensure complete representation on these committees.

To help the Regional Land Use Geologists understand the Forest Management Planning process, the SO Regional Land Use Geologist attended the MNR Forest Management Planning Overview training session held in Timmins in the fall of 2002.

Municipal Planning

The SO Regional Land Use Geologist reviewed 11 draft and final Official Plans and other planning-related documents in 2002. Recommendations for changes were made based on the requirements of the minerals-related Provincial Policy Statement and the mineral potential or mining history of the areas in question. Some of the documents were for areas that have had very little mineral exploration and development. Others were for areas that have significant potential for mineral exploration and development, or have had a great deal of exploration and mining activity and now host extensive mine hazards. Input was also provided to municipalities that are beginning to prepare their Official Plans. These Official Plans are expected in early 2003.

The SO Regional Land Use Geologist presented a poster at the Ontario Professional Planners Institute (OPPI) annual convention in London in the fall. Many worthwhile presentations were made at the conference and the information sessions were extremely valuable. In October, the SO Regional Land Use Geologist presented a poster at the MMAH Northeastern Municipal Conference. Once again, many contacts were made and many issues were discussed.

Having previously authored the Aggregate Resources Inventory Paper (ARIP) for the Sudbury area, the SO Regional Land Use Geologist was asked to provide expert testimony in a local Ontario Municipal Board (OMB) hearing. With the support of MMAH, legal counsel and MNR, the government received a favourable ruling at the hearing. Although it was a relatively small OMB hearing, it required a large amount of preparation and dedication by all ministries.

MNR and MMAH asked for the SO Regional Land Use Geologist's opinion on another aggregate-related planning issue in the Sudbury East Planning Area. After a successful field visit, the issue was resolved to the satisfaction of both the provincial government and the Sudbury East Planning Area.

First Nations

Progress was slow in the Algonquins of Golden Lake land claim negotiations this year. An update on the status and progress of the land claim was presented by MNR to MNDM in the fall of 2002. Negotiations are ongoing and will continue into 2003.

Other

One of the major projects undertaken in 2002 was the completion of draft copies of 89 Provincially Significant Mineral Potential (PSMP) industrial minerals maps. Each map covers a 1:250 000 scale NTS map area, and illustrates the location of important sand and gravel deposits, recommended bedrock-derived aggregate areas and other industrial minerals. Maps were created and given an initial edit, followed by corrections, additions and a second edit by the SO Regional Land Use Geologist. Once the second edit was complete, the maps were forwarded to the appropriate District Geologist for final edits. All District Geologist edits, and final PSMP Industrial Minerals maps will be completed in 2003.

The SO Regional Land Use Geologist also completed and edited Aggregate Resources Inventory Paper (ARIP) 176 *The Aggregate Resources Inventory of the Echo Lake to Batchawana Bay Area*. This report was released in association with the Ontario Prospectors Association (OPA) annual Ontario Exploration and Geoscience Symposium held in December 2002.

The SO Regional Land Use Geologist attended and participated at the 2002 Prospectors and Developers Association of Canada annual convention in March and the Ontario Prospectors Association's Ontario Exploration and Geoscience Symposium held in December 2002.

Metric Conversion Table

Conversion from SI to Imperial			Conversion from Imperial to SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
		LENGTH			
1 mm	0.039 37	inches	1 inch	**25.4**	mm
1 cm	0.393 70	inches	1 inch	**2.54**	cm
1 m	3.280 84	feet	1 foot	**0.304 8**	m
1 m	0.049 709	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	**1.609 344**	km
		AREA			
1 cm^2	0.155 0	square inches	1 square inch	**6.451 6**	cm^2
1 m^2	10.763 9	square feet	1 square foot	**0.092 903 04**	m^2
1 km^2	0.386 10	square miles	1 square mile	2.589 988	km^2
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
		VOLUME			
1 cm^3	0.061 023	cubic inches	1 cubic inch	**16.387 064**	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m^3
1 m^3	1.307 951	cubic yards	1 cubic yard	0.764 554 86	m^3
		CAPACITY			
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	**4.546 090**	L
		MASS			
1 g	0.035 273 962	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 747	ounces (troy)	1 ounce (troy)	**31.103 476 8**	g
1 kg	2.204 622 6	pounds (avdp)	1 pound (avdp)	**0.453 592 37**	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	**907.184 74**	kg
1 t	1.102 311 3	tons (short)	1 ton (short)	**0.907 184 74**	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	**1016.046 908 8**	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	**1.016 046 90**	t
		CONCENTRATION			
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

	Multiplied by	
1 ounce (troy) per ton (short)	31.103 477	grams per ton (short)
1 gram per ton (short)	0.032 151	ounces (troy) per ton (short)
1 ounce (troy) per ton (short)	20.0	pennyweights per ton (short)
1 pennyweight per ton (short)	0.05	ounces (troy) per ton (short)

Note: Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries, published by the Mining Association of Canada in co-operation with the Coal Association of Canada.

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